METHODS AND APPARATUS FOR PROTECTING INFORMATION

ABSTRACT OF THE DISCLOSURE

System, methods and apparatus are applicable to enable owners and vendors of software to protect their intellectual property and other rights in that software. The

5   system also enables vendors or distributors of software to charge per-use for an instance of software. The system produces a unique, unforgeable, tag for every vendor supplied instance (copy) of specific software. Each user device is equipped with a supervising program that ensures, by use of the tag and other information, that no software instance will be used on the device in a manner infringing on the vendor, distributor, or software

10   owner's rights. When installing or using a vendor-supplied software instance, the supervising program verifies the associated tag and stores the tag. When installing or using untagged software, the supervising program fingerprints selected portions of the software and stores the fingerprints. Software is used on a user's device through the supervising program which ensures proper use of the software. A vendor can submit a

15   copy of infringing software to a guardian center which fingerprints appropriate portions of the infringing software. A user device's (104) supervising program periodically calls up, or can be called up, by the guardian center. During call-up, the supervising program can securely sends to the guardian center information about the use of the software instances associated with tags and fingerprints. The guardian center detects

20   unauthorized use of software by comparison of current call-up data with records of past call-ups involving the same tags, and/or by comparing call-up supplied fingerprints with fingerprints of infringing software stored by the guardian center. The guardian center completes the call-up by enabling continued use of properly used software instances and generating appropriate punitive actions upon detection of improperly used software

25   instances on the calling user's device. The data supplied by a supervising program during call-up is also employed by the guardian center to prepare data on usage by a user's device of vendor or distributor supplied software instances, for pay-per-use or pay-per-view billing.